

6 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

This chapter describes the irreversible and irretrievable commitments of resources associated with the implementation of the proposed action or any of the alternatives. A resource commitment is considered *irreversible* when primary or secondary impacts from its use limit future use options. Irreversible commitments apply primarily to nonrenewable resources, such as minerals or cultural resources, and to those resources that are renewable only over long time spans, such as soil productivity or forest health. A resource commitment is considered *irretrievable* when the use or consumption of the resource is neither renewable nor recoverable for use by future generations. Irretrievable commitments apply to the loss of production, harvest, or use of natural resources.

Visual resources would be irretrievable during the duration of the project because the visual quality would be lost. If the project were removed, the area could eventually revert back to its original visual state, and the habitat could revert to its original form and function depending on the effect of other ongoing land use practices (e.g., commercial timber harvests). Each alternative route would be visible from a number of recreation areas or during general recreational use of the area (e.g., by ATV and snowmobile users, canoeists, and campers). These areas represent locations where visitors are likely to be highly sensitive to the landscape.

Placing of the support structures and expansion of the Orrington and Kimball Road Substations would have irreversible impacts on soils and vegetation. Irreversible commitments of resources would include removal of small areas of farmland from potential use for agriculture within the ROW. Some clearing of cropland may be required during construction of the proposed transmission line; however, only the land within the immediate footprint of the support structures would be irreversibly committed. The major loss of soil and productivity would be irreversible where the support structure poles and substation expansions are located.

The direct loss of vegetation due to clearing and construction would be irretrievable but could be reduced by application of mitigation measures. ROW routing through a deer wintering area would be considered irreversible to at least a portion of the deer yard for the life of the project. Special status plant species would be identified and impacts mitigated upon precise siting of the ROW (e.g., altering the placement of support structures) within the chosen alternative route.

Cultural resources are nonrenewable, and disturbance of such resources is an irretrievable impact. Preservation of cultural resources is possible by avoiding the resources. Data recovery of cultural resources that are eligible for listing on the NRHP may be a necessary mitigation measure; however, data recovery is an irreversible use, effectively eliminating options for future preservation or study in situ. No eligible cultural resources are known on any of the alternative routes. Access to previously inaccessible areas could lead to vandalism of both known and undiscovered cultural resources, thereby rendering them irretrievable.

Construction of the transmission line, expansion and modification of the substations, and the addition of AC mitigation to the M&N gas pipeline would require the irretrievable

commitment of standard building materials and fuel for construction equipment. The resources irretrievably committed for operation and maintenance of the project would be relatively minor quantities of fuel for maintenance vehicles and equipment, operating supplies, and miscellaneous chemicals. Some materials, such as ceramic insulators and concrete foundations, may be irrevocably committed, while the metals used in conductors, support structures, and other equipment could be recycled. None of the identified construction resources are in short supply, and all should be readily available in or to the local region.

Water resource commitments would be insignificant during construction. Except for water chemically bound in the production of concrete, water needed for construction would eventually be recycled through the atmosphere and surface waters for distribution elsewhere. Recovery of ecosystems by natural processes would occur within a very short time. Construction of facilities (support structures) is an irretrievable commitment of land use, since the transmission line and its support structures would not be removed for the foreseeable future.